
Attention deficit disorders--drugs or nutrition?
Matsudaira T.
Institute of Psychiatry, King's College London. hge03605@yahoo.co.jp

Abstract
3-9% of schoolchildren in the U.K. suffer Attention Deficit and Hyperactivity Disorder (ADHD). Since the 1950s stimulants have been used, particularly methylphenidate and dextroamphetamine, with some 75% response rate. The first non-stimulant medication--atomoxetine hydrochloride, has also been used. However, side effects have included: growth retardation; appetite loss; headache; stomachache; heart problem; insomnia; seizure; change of character; addiction or even suicidal thoughts. Alternative treatments have been used including omega-3s, yet the way they benefit in ADHD is uncertain. They may be important in remodelling dendrites and synapses, and/or sustaining: blood brain barrier, neuronal membrane. neurotransmitter channel, receptors and ion channel. Stevens in 2003 found long-chain polyunsaturated fatty acids (LCPUFAs) effective for oppositional defiant disorder, whereas Eicosapentaenoic acid (EPA) specifically was helpful with disruptive behaviour. Docosahexaenoic acid (DHA) is important during gestation and early infancy, particularly for neurodevelopment. The Durham Trial by Richardson published in 2005, tested omega-3s with omega-6s on schoolchildren with developmental coordination disorder (many of them had ADHD symptoms), improving scores in co-ordination and short term memory.

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